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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,229	03/16/2004	Tatsuya Hojo	5576-158	2013
20792 7590 09/09/2009 MYERS BIGEL, SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627				
EXAMINER				
SOROUSH, ALI				
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09/09/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/801,229

**Applicant(s)**

HOJO ET AL.

**Examiner**

ALI SOROUSH

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 9-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgement of Receipt***

Applicant's response filed on 06/05/2009 to the Office Action mailed on 01/05/2009 is acknowledged.

### ***Status of the Claims***

Claims 1, 9, and 14 are currently pending and claims 5-8 is cancelled. Therefore, claims 1-4 and 9-18 is pending examination for patentability.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. The rejection of claims 1-4 and 9-18 are under 35 U.S.C. 103(a) as being unpatentable over Buschmann et al. (European Patent Application 92117883.6, Published 05/12/1993) **is maintained**.

***Applicant Claims***

Applicant claims a sex pheromone sustained release dispenser comprising: three or more sex pheromone substances, wherein each substance is an aliphatic derivative having 10 to 20 carbons, and a first and second polymer chamber and further comprising a polymer membrane, and wherein the first and second polymer chambers are made of the same polymer are made of the same material.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

Buschmann et al. discloses a containment device for protecting agricultural crops, wherein said containment device comprises a sex pheromone controlled release dispenser for simultaneously controlling two or more insect pests, wherein said sex pheromone controlled release dispenser comprises two or more polymeric chambers comprising two or more sex pheromones, such as (Z)-9-dodecenyl acetate (Z9-12:OAc), (Z)-9-tetradecenyl acetate (Z9-14:OAc) and/or (Z)-11-tetradecenyl acetate (Z11-14:OAc), wherein said Z9-12:OAc has a faster diffusion rate as compared to said Z9-14:OAc and said Z11-14:OAc, due to the respective physicochemical properties (i.e., molecular weight and vapor pressure) of said sex pheromones, wherein each of said two or more polymeric chambers may be overlaid with the same pheromone permeable polymeric film laminate that may vary in size, thickness and/or shape, so as to simultaneously impart an optimal release rate of each of said two or more sex pheromones, thereby providing for the simultaneous control of said two or more insect pests (page 2, lines 1-15; page 4, lines 4-11; page 8, lines 5-7 and 12-14; page 9, lines

8-11 and 22-24; page 10, lines 1-2; page 12, lines 6-8 and 14-22; page 13, lines 20-23; page 14, lines 18 and 19; page 15, lines 7-12 and 16-18; page 16, lines 1-3 under Example 2; claims 1, 3 and 6-8). Buschmann et al. teach "The design of the dispenser with two or more chambers produces the advantage that two or more pests can be treated at the same time, in a single work operation." (See page 12, Lines 6-8). The dispenser's chambers can be made from materials such as polyhydroxybutyric acid and the chamber is overlaid with a film made from materials such as polyhydroxybutyric acid. (See page 17-18, claims 1-6).

***Ascertainment of the Difference Between Scope the Prior Art and the Claims  
(MPEP §2141.012)***

Buschmann et al. does not anticipate a sex pheromone sustained release dispenser that comprises three or more sex pheromone substances. However, such a dispenser is made obvious.

Bushmann et al. does not anticipate a sex pheromone sustained release dispenser that the chambers and the film cover is made from the same material. However, such a dispenser is made obvious.

***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use more than three sex pheromones. Bushmann et al. teach that it is beneficial to control two or more insect pests with sex pheromones. Therefore, it

would have been obvious to one of ordinary skill in the art to add three or more sex pheromones in order to control three or more insect pests.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the same material for creating the chambers and the overlaid film. One would have been motivated to do so because Bushmann et al. teach that the chambers may be made of polyhydroxybutyric acid and the overlaid film can also be made of polyhydroxybutyric acid. For the foregoing reasons the instant invention would have been obvious to one of ordinary skill in the art at the time of the instant invention.

#### ***Response to Applicant's Arguments***

Applicant argues that the newly added limitation that the dispenser's chamber and membrane are made of the same polymer selected from polyolefin, acrylic, polyester, polyamide, methacrylic, copolymers of olefin and vinyl alcohol ester is not taught or suggested by Neumann et al. Applicant's argument has been fully considered but found not to be persuasive. It is deemed merely judicious selection of polymers, such as the polyolefin polyethylene, for construction of the polymer chambers and polymer membranes, as taught and suggested by Bushmann et al., by one of ordinary skill in the art in the absence of evidence to the contrary. The expected and predictable result remains a sex pheromone dispenser. Further, Neumann et al. teach in Example 1 a dispenser made of a polyvinyl chloride and/or polyethylene lower film (250 $\mu$ m) and a permeable upper film of polyethylene (70 $\mu$ m) and it is charged with sex pheromones. (See page 15, Lines 15-17). It is the Examiners position that this meets the newly added limitation.

Applicant further argues that Neumann et al. does not teach the simultaneously combating two or more pests. Applicant's argument has been fully considered but found not to be persuasive. Neumann et al. teach, "The design of the dispenser with two or more chambers produces the advantage that two or more pests can be treated at the same time, in a single work operation." (See page 12, Lines 6-8).

Applicant finally argues Neumann et al. does not teach the release of the pheromone substances at substantially the same rate. Applicant's argument has been fully considered but found not to be persuasive. Applicant is arguing limitations not found in the claims. Therefore, the rejection of claims 1-4 and 9-18 are under 35 U.S.C. 103(a) is maintained.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush

Patent Examiner

Art Unit: 1616



Application/Control Number: 10/801,229  
Art Unit: 1616

Page 8